# RUSSELL CHUA KUI HON +65 98203733 | russellchua95@gmail.com

## **EDUCATION**

Nanyang Technological University, Singapore

Aug 2017 – Dec 2020

Undergraduate, Bachelor of Engineering Computer Science

- Bachelor of Engineering (Computer Science)
- Specialization: Data Science and Artificial Intelligence
- Current Honors (Distinction)
- Achieved Distinction in (1) Advanced Computer Architecture (2) Advance Software Engineering
- Relevant Modules: (1) Data Mining & Analytics (2) Natural Language Processing (3) Computer Security (4) Machine Learning (5) Intelligent Agents

University of California, Los Angeles Summer Exchange Program June 2018 - Aug 2018

Singapore Polytechnic, Singapore

April 2012 – May 2015

**Diploma in Infocomm Security Management** 

## PROFESSIONAL EXPERIENCE

#### **Autodesk Singapore**

Aug 2020 – Dec 2020

Software Development Intern

- Research and develop product analytics and enhance analytics dashboard to drive better product decision. Improve AutoCAD Web App to support PWA.
- Enhancement of AutoCAD web core engine, automating the process of creating cross platform software for desktop, web & mobile.

#### **Accenture Singapore**

Jun 2020 – Jul 2020

Solution Architect Intern

- Conducting research on software/hardware product upgrades for organization operational enhancements.
- Understanding technological architecture and providing solutions that aligns with overall business needs.
- Development of change request report for new technology upgrades and implementation plans.

### **GovTech Singapore**

May 2019 – Aug 2019

# Frontend Engineer Intern

- Worked on developing CI/CD pipelines to ensure efficient software testing and project migrations.
- Proposed web architecture and framework. Developed fully functional application with ReactJS, AWS API Gateway and Lambda.
- Docker containerization for high availability deployments and experimented with Kubernetes for application scalability.
- Wrote Cloudformation scripts that improved overall service migration solutions adopted across the application infrastructure teams.

# Infocomm Development Authority of Singapore, Government Digital Services, Development Operations

Aug 2014 - Jul 2015

Associate Consultant (Part-Time)

 In charge of providing support for development teams, setting up web application sandboxes for testing.

# RUSSELL CHUA KUI HON +65 98203733 | russellchua95@gmail.com

- Adhering to Linux system hardening practices, worked on firewall and networking configurations for discretionary access control.
- Integrated security software to generate security reports during code builds to ensure secure coding CI/CD phases.

## ACADEMIC/PROFESSIONAL PROJECTS

Final Year Project
Title: Chatbot Framework for Chatbot Performance Comparison

Aug 2019 - May 2020

- Developed a full stack web application with NodeJS and ReactJS that serves as a Chatbot platform for Multi-Chatbot service comparisons.
- Integrated real-time speech transcription for Chatbot interactions.
- Developed own Deep Neural Network based Text Classification model for question and answer matching.
- Docker containerization of application and orchestration with Azure Kubernetes Service.

### **Advanced Software Engineering Project**

Jan 2019 – May 2019

Title: Face Recognition Application for attendance taking

- Built on Face API to extract facial descriptors for matching on specified threshold between NodeJS and Firebase.
- Achieved fast and efficient matching of more than 10 students concurrently.
- Managed to achieve accurate readings and capture attendance with minimal false positives for a class size of 50 students.

## SKILLS/INTEREST

**Programming Skills:** Python, Java, JavaScript, NodeJS, ReactJS, TypeScript, HTML/CSS **Framework and Application**: Flask, Express, Docker, Git, Jira, Dialogflow, Firebase, PWA

Web Servers: Apache, Nginx

Cloud: Amazon Web Services, Microsoft Azure, Google Cloud

**External Certification**: Organizational Systems Wireless Auditor (OSWA)

# **ACHIEVEMENTS & AWARDS**

- 1st place at CPF Hackathon 2020 (11/2020)
   Leverage Microsoft Azure services to build a personalized digital experience for CPF members. Built a data driven web application backed by azure's machine learning technology and container orchestration tools conforming to high availability and scalability practices
- 2<sup>nd</sup> place at Shopee SCSE Hackathon 2020 (03/2020) Ideated and proposed a mobile learning platform for university students comprising of topic modelling, resource recommendation along and group collaboration. Developed transcription and topic modelling as a Proof of Concept.
- 3<sup>rd</sup> place at HackNTU hackathon 2019 (03/2019)
   Proposed and developed a first responder application that leverages facial recognition technology to quickly identify patient's or victim's medical profile during emergencies.
- Finalist and Best Pitch at Singapore Social Innovation Festival hackathon 2018 (09/2018)
   Proposed and developed a platform that simplifies the donation process of unwanted items by connecting donors to suitable charity organizations and upcycling campaigns, reducing inefficiencies and waste.